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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,215	07/14/2003	Rainer Gadow	9252-000001/DVA	7011
27572	7590	03/30/2005	EXAMINER	
HARNES, DICKEY & PIERCE, P.L.C. P.O. BOX 828 BLOOMFIELD HILLS, MI 48303			KOSLOW, CAROL M	
			ART UNIT	PAPER NUMBER
			1755	

DATE MAILED: 03/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/619,215

Applicant(s)

GADOW ET AL.

Examiner

C. Melissa Koslow

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2-40 and 42-80 is/are pending in the application.
- 4a) Of the above claim(s) 61-80 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-8, 16-21 and 48-54 is/are allowed.
- 6) ☒ Claim(s) 9-15, 29, 30, 32-35, 39, 40, 42-46 and 55-60 is/are rejected.
- 7) ☒ Claim(s) 31 and 36-38 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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This action is in response to applicants' amendment of 1 February 2005. The amendment to the specification has overcome the objection to the disclosure. The amendments to the claims have overcome the objection to claim 36, the objection of the specification with respect to antecedent basis for claims 1 and 41 and the 35 USC 112 rejection, second paragraph rejections. Applicant's arguments with respect to antecedent basis in the specification for the mixtures of claims 6 and 35 have been fully considered and are persuasive. This objection has been withdrawn. Applicant's arguments with respect to the obviousness double patenting rejection over claims 47 and 48 have been fully considered and are persuasive. This rejection over those claims has been withdrawn. Applicant's arguments with respect to the remaining objections and rejections have been fully considered but they are not persuasive.

Applicant's election with traverse of Group I, claims 2-60 in the reply is acknowledged. The traversal is on the grounds that there does not appear to be a serious burden upon the Examiner to examine all the groups. This is not found persuasive because the different classification of each group is *prima facie* evidence of a serious burden..

The requirement is still deemed proper and is therefore made FINAL.

Claims 61-80 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply.

This application contains claims 61-80 drawn to an invention nonelected with. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

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The drawings are objected to because in figure 9, “chemistry” is missing an “e”.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The Examiner inserted the page number, not the figure number by mistake. Figure 8 is acceptable.

The disclosure is objected to because of the following informalities: On page 20, line 14, “Al<sub>2</sub>O<sub>3</sub>” should be “Al” for the reasons given in the previous action. Appropriate correction is required.

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The specification does not teach the mixture of solvents as claimed in

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claim 5. The specification does not teach the mixture of grinding elements as claimed in claims 17.

Applicants state page 8, paragraph 4 provides antecedent basis for the claimed mixtures, but there are no mixtures of at least two of methanol, ethanol and isopropanol taught in this paragraph. Applicant did not point out where there is antecedent basis for the use of a mixture of alumina and zirconia as grinding bodies. The specification teaches alumina or zirconia grinding bodies on page 9. The cited case law is not applicable for this objection since they address with 35 USC 112 or claim language. There do not address the above situation where the claimed subject does not have clear support or antecedent basis in the specification. MPEP 608.01(o) and 37 CFR 1.75(d)(1) both state the description must provide clear support or antecedent basis for the terms appearing in the claims. The objection is maintained.

Claims 29 and 39 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification teaches on page 11 the starting materials used the sol-gel process of claim 29 are soluble salts of M and Me, not oxides as claimed in claims 29 and 39. Page 23 of the specification teaches that soluble precursors salts of the claimed oxides and salts are used in the sol-gel process and that the claimed oxides are precipitated during the process. It does not teach adding the claimed oxides. This discrepancy need to be clarified.

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In addition, the added limitation in claim 29 that the oxides are soluble in water and/or alcohol is new matter since there is no where in the original disclosure of water and/or alcohol soluble metal oxides.

The amendment to the claim 29 did not overcome this rejection since the claims still include oxides. The oxides in claim 39 are not soluble in water and/or alcohol.

Claims 29 and 39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 39 is indefinite since the claimed oxides and alloy oxides, with the exception of potassium oxide, rubidium oxide and cesium oxide, are not water and/or alcohol soluble. Claim 29 is indefinite since oxides of La, Nd, Zn, transition metals, rare earth metals and alkaline earth metals are all water and/or alcohol insoluble.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 9, 11-15, 22, 24-28, 40, 42-46 and 55-60 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-6, 11 and 13

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of U.S. Patent No. 6,602,814. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed material in the patent suggests that claimed in this application. The material in the patent has the same composition as in this application. While the patent does not indicate the form of the taught material, one of ordinary skill in the art would have found it obvious to make the material into powders, which suggests the material of claims 9, 11-15, 22, 24-28, 40, 42-46 or to shape the material using any conventional means and then sintering the shaped material to produce a thermal insulating part. The suggested resulting product make obvious the part of claims 55-60.

Applicants' argue the rejection is improper since there was a restriction made in the patent application. The rejected claims were not part of the restriction requirement of the parent application since they were not present in the parent application.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 9-13 and 22-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 96/28384.

This reference teaches aluminate pigment powders having the formula  $Al_{2-x-y}La_xO_3 \cdot yM$ , where M can be NiO or FeO, x is 0.45-1.51 and y is 0.007-0.2. When the molar amounts are determined from this formula, the resulting amounts are about 0.35-10 mol% M, about 25-75 mol%  $La_2O_3$  and the remainder is alumina. These molar amounts overlap the claimed ranges. Product claims with numerical ranges which overlap prior art ranges were held to have been obvious under 35 USC 103. *In re Wertheim* 191 USPQ 90 (CCPA 1976); *In re Malagari* 182 USPQ 549 (CCPA 1974); *In re Fields* 134 USPQ 242 (CCPA 1962); *In re Nehrenberg* 126

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USPQ 383 (CCPA 1960). The taught powder suggests that claimed, even though it is produced by a different process than those in the rejected product-by-process claims. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). The pigments are produced by calcining a mixture of precursor materials and grinding the resulting material into a desired size. Pigment are known to have a particle size in the range of a maximum of 20 microns, which overlaps the claimed range and the grinding would be expected to produce particles having a specific surface area that also overlaps that claimed, absent any showing to the contrary. The reference suggests the claimed material.

In response to applicant's argument that the reference does not teach a thermal insulating material, a recitation of the intended use of the claimed invention must result in a structural or compositional difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art composition is capable of performing the intended use, then it meets the claim. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963). Applicants have not presented any evidence that the taught material is not thermally insulating.

Applicants argues the reference teaches a vast number of different stoichiometry and different atoms. There is only a single formula, which suggests only one stoichiometry and the number of atoms to select from is not that numerous. Since there is not a list of thousands of



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possibilities, applicants' reliance on *In re Baird*, is not applicable since one skilled in the art could envisage each member of the genus. *In re Petering*, 301 F.2d 676, 681, 133 USPQ 275, 280 (CCPA 1962) (emphasis in original) and there is nothing teaching away from the use of M as NiO or FeO and where Ln is La and Y is not present. The examples teaches embodiments where Y is not present. Applicants have not shown that the products of claims 22-26 are different from that taught. Burden is on applicants to show product differences in product by process claims. *In re Thorpe* 227 USPQ 964 (Fed. Cir. 1985); *In re Best* 195 USPQ 430 (CCPA 1977); *In re Fessman* 180 USPQ 324 (CCPA 1974); *In re Brown* 173 USPQ 685 (CCPA 1972). The rejection is maintained.

Claims 29-30, 32-35, 40 and 42-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 5,849,659.

This reference suggests a material having the formula  $\text{Sr}_{1-x}\text{La}_x\text{MnAl}_{11}\text{O}_{19}$ , where x is 0.2-0.8 or  $\text{Ba}_{0.4}\text{Sr}_{0.4}\text{La}_{0.2}\text{MnAl}_{11}\text{O}_{19}$ . The taught material is produced by mixing alkoxides, or alcoholates of Al, Mn, La and Sr or Sr and Ba to form a solution, precipitating by the addition of water, separating the solid material, drying the solid and annealing the dried product at 500-1300°C (col. 3, lines 1-35). The alkoxides can be methoxide, ethoxide, propoxide or butoxide, which are the claimed alcoholates. When the amounts of the taught components of the formula are given as molar percentages, the amounts of would be expected to overlap, absent any showing to the contrary. The taught process is the same as that in claim 29, thus the result particles would be expected to have a size and surface area that falls within that claimed. The reference suggests that claimed.

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The fact the reference teaches a catalyst of material having the formula  $Sr_{1-x}La_xMnAl_{11}O_{19}$ , where x is 0.2-0.8 or  $Ba_{0.4}Sr_{0.4}La_{0.2}MnAl_{11}O_{19}$  and a noble metal does not overcome the rejection since the examples teach the oxides are produced first and then the oxides are treated to produce the catalyst. The reference does teach the claimed material and process. This argument is not convincing.

Applicants argue the reference does not teach the claimed starting materials of M and Me, but claim 33 teaches the starting material are alcoholates, which indicates applicants considers alcoholates as salts of M and Me. Alcoholates are soluble in alcohol. The rejection is maintained.

Claims 2-8, 16-21 and 47-54 are allowable over the cited art of record.

Claims 31 and 36-38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 39 would be allowable if rewritten or amended to overcome the rejections under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

The claims are allowable for the reasons given in the previous office action.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melissa Koslow whose telephone number is (571) 272-1371. The examiner can normally be reached on Monday-Friday from 8:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo, can be reached at (571) 272-1233.

The fax number for all official communications is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cmk  
March 25, 2005

  
C. Melissa Koslow  
Primary Examiner  
Tech. Center 1700